

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. Claims 1-3, 5, 6, 12 and 15 are currently pending in this application. None of the claims have been amended. The Specification has been amended to identify previous "Examples 1-8" as comparative or "Referential Examples 1-8", as they now fall outside of the scope of the present invention based on previous claim amendments. Accordingly, no new matter has been added.

At the outset, the present application is believed to be in condition for allowance. Entry of the accompanying amendment is requested under 37 C.F.R. §1.116, as the amendment does not raise any new issues which would require further search and/or consideration by the Examiner. Furthermore, Applicants request entry of this amendment in order to place the claims in better form for consideration on Appeal.

In view of the amendments and remarks herein, Applicants respectfully request that the Examiner withdraw all outstanding rejections and allow the currently pending claims.

Issues Under 35 U.S.C. 103(a)

Claims 1-3 and 5-6 stand rejected under 35 U.S.C. 103(a) as being obvious over Jenkins et al. (U.S. 5,637,143) (hereinafter Jenkins '143) in view of Schmid et al. (U.S. 5,364,467) (hereinafter Schmid '467) in further view of Mei et al. (U.S. 6,894,089) (hereinafter Mei '089). Additionally, claims 12 and 15 stand rejected as being obvious over Jenkins '143 in view of Schmid '467, Mei '089 and Shimizu et al. (U.S. 4,842,837) (hereinafter Shimizu '837). Applicants respectfully traverse.

The Examiner asserts that Jenkins '143 teaches an anti-corrosive aluminum pigment of high metallic luster, treated with phosphomolybdic acid. The Examiner acknowledges that Jenkins '143 fails to teach or suggest that the pigment is coated with silica, or that the pigment is further coated with a coating prepared from a silane composition. The Examiner relies on the teachings of Schmid '467 and Mei '089 to overcome these deficiencies.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Additionally, there must be a reason why one of ordinary skill in the art would modify the reference or combine reference teachings to obtain the invention. A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). There must be a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* The Supreme Court of the United States has recently held that the "teaching, suggestion, motivation test" is a valid test for obviousness, albeit one which cannot be too rigidly applied. *Id.* Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.*

Jenkins '143 discloses an aluminum pigment treated with a molybdenum coat (see, e.g., col. 2, lines 34-65). However, as correctly asserted by the Examiner, Jenkins '143 fails to teach or suggest an aluminum pigment comprising a silica coat covering the molybdenum coat, or a

coat prepared from a silane coupling agent on said silica coat. Schmid '467 and Mei '089 fail to cure these deficiencies.

Schmid '467 discloses treating a molybdenum-coated aluminum pigment with silicon oxide (see, e.g., col. 3, lines 3-28). Mei '089 discloses surface treatment of pigments with organosilicon compounds having at least one functional group capable of reacting with an acid or an anhydride (see, e.g., col. 1, lines 9-17). However, Applicants submit that none of the references teach or suggest the simultaneous use of three coatings on the aluminum pigment (i.e., molybdenum, silica and silane coupling agent) as presently claimed (see, e.g., claim 1).

The Examiner's attention is respectfully directed to the enclosed Declaration Under 37 C.F.R. 1.132, which shows that the present invention is superior and exhibits unexpected and advantageous properties over the prior art of record. Specifically, the Declaration shows that superior results are obtained when combining three coatings (i.e., molybdenum, silica and a silane coupling agent), as compared to the case where only one coating or two coatings is/are applied.

As evidenced by the results discussed in the enclosed Declaration, only the pigment corresponding to present claim 1 is ranked as superior (i.e., a rating of "5") in terms of **both** the color tone of the painted plate and the base adhesion of the film (moisture resistance/adhesiveness) (emphasis added). Furthermore, this pigment generates absolutely no gas.

In stark contrast, the pigments in accordance with the prior art may exhibit either a good color tone of the painted plate or good moisture resistance/adhesiveness, **but none of them exhibit superior results in terms of both of these properties** (emphasis added).

Applicants submit that the superior results obtained by the present pigment are unexpected and rebut any *prima facie* case of obviousness arguably established by the Examiner. As such, reconsideration and withdrawal of this rejection are respectfully requested.

Conclusion


All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and objections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Vanessa Perez-Ramos, Reg. No. 61,158 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: July 17, 2009

Respectfully submitted,

for By  #61,158
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Attachment: Executed Declaration Under 37 CFR 1.132

Docket No.: 0033-0983PUS1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Yoshiki HASHIZUME et al.

Application No.: 10/525,068

Confirmation No.: 5831

Filed: February 18, 2005

Art Unit: 1793

For: ALUMINUM PIGMENT, METHOD OF
MANUFACTURING THE SAME AND RESIN
COMPOSITION

Examiner: S. ABU ALI

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

I, Yoshiki HASHIZUME, declare and say as follows:

I graduated from Kyoto University, Faculty of Engineering, in March 1975. Since April 1976, I have been employed by Toyo Aluminium Kabushiki Kaisha, engaged in research and development of aluminum materials (aluminum paste, aluminum powder, aluminum nitride powder, etc.) Currently, I am a Manager, Research & Development Dept., Core Technology Center.

I am familiar with U.S. Application Serial No. 10/525,068, of which I am a co-inventor. I have reviewed all Office Actions issued in connection with this application. I have also reviewed all of the references cited by the Examiner in these Office Actions.

The following shows that the present invention is superior and exhibits unexpected and advantageous properties over the prior art of record (Jenkins et al. (U.S. 5,637,143); Schmid et al. (U.S. 5,364,467); Mei et al. (U.S. 6,894,089); and Shimizu et al. (U.S. 4,842,837)).

Applicants' Examples and Comparative Examples described in the original disclosure of Application No. 10/525,068 show that superior results are obtained when combining three coatings (i.e., molybdenum, silica and a silane coupling agent), as compared to the case where only one coating or two coatings is/are applied.

The present invention

Example 10

Example 10 describes an aluminum pigment according to the present invention, wherein three coats are formed over the aluminum particles (i.e., (i) a molybdenum coat, (ii) a silica coat and (iii) a coat prepared from a silane coupling agent). Example 10 represents presently pending claim 1.

The prior art of record

Comparative Example 3

Comparative Example 3 describes a pigment corresponding to that disclosed by Jenkins '143. In Comparative Example 3, only one coat is deposited over the particles (i.e., a molybdenum coat).

Referential Examples 1-3 and 5-8

Referential Examples 1-3 and 5-8 correspond to the pigment disclosed by Schmid '467, comprising two coats disposed over the particles ((i) a molybdenum coat and (ii) a silica coat).

Referential Example 4

Referential Example 4 corresponds to Mei '089, and describes a pigment comprising two coats, namely, (i) a molybdenum coat, and (iii) a coat prepared from a silane coupling agent.

Comparison between the present invention and the prior art of record

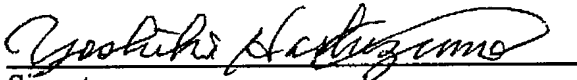
Tables 4-6, described at pages 38 and 39 of Application No. 10/525,068, show the superior and unexpected results obtained by the aluminum pigment according to the present invention.

As evidenced by Tables 4-6, only the pigment of Example 10 (corresponding to present claim 1) was ranked as superior (i.e., a rating of "5") in terms of both the color tone of the painted plate and the base adhesion of the film (moisture resistance/adhesiveness) (note that Example 9 corresponds to an additional embodiment of the present invention). Furthermore, the pigment of Example 10 generates absolutely no gas.

The pigments of Referential Examples 1-8 and Comparative Example 3 may exhibit either a good color tone of the painted plate or good moisture resistance/adhesiveness, but none of them exhibit superior results in terms of both of these properties.

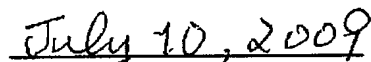
It is my opinion that this evidence shows that the present invention is superior and exhibits unexpected and advantageous properties over the prior art of record.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


Signature

Yoshiki HASHIZUME

Typed or Printed Name


Date